FIG. 1

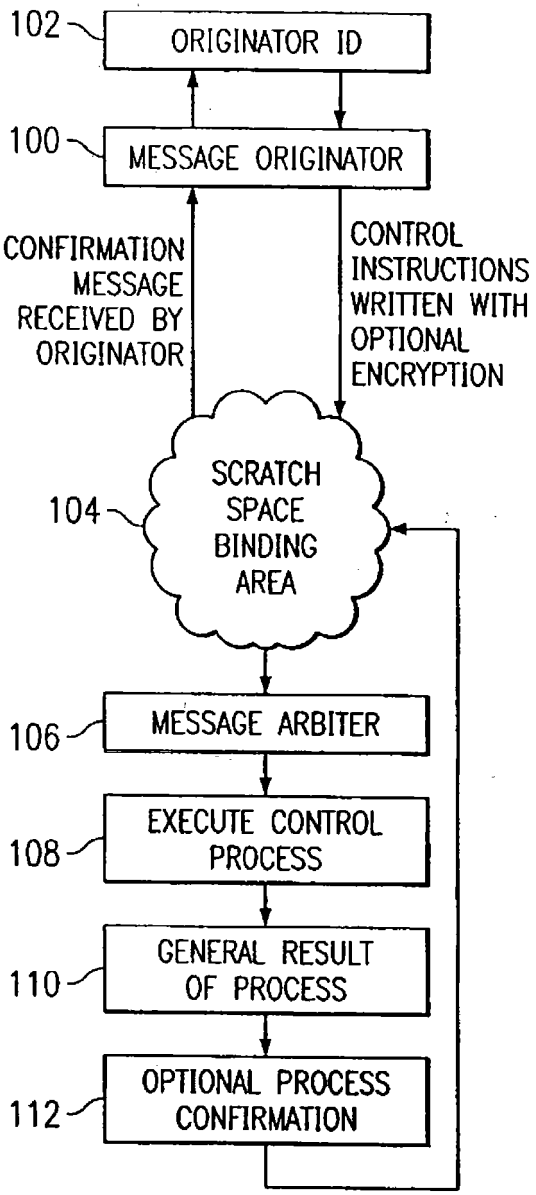


FIG. 5

PING MESSAGE

PING
(NODE ID #1) ORIGINATING NODE
(NODE ID #2) NODES ADDED
(NODE ID #3)
.
.
.
(NODE ID #n)

FIG. 6

CONTROL MESSAGE

1) TIME:(00:00:00:00)
2) DATE: (xx/xx/xx)
3) RESET:
4) SILENCE:
5) KILL:
6) SHELL:
7) NEW MASTER: (XXXXXXXXXXXXXX)
8) SLAVE MASER: (XXXXXXXXXXXXXX)
9) NET RESET
10) NET DOWN
11) CHANGE ID: (XXXXXXXXXXXXXX)
12) HELLO
13) REQUEST NEW ID
14) MOVE DATA: (XXXXXX.XXX)
15) MOVE PROGRAM: (XXXXXX.XXX)
16) SEND MAP

FIG. 2

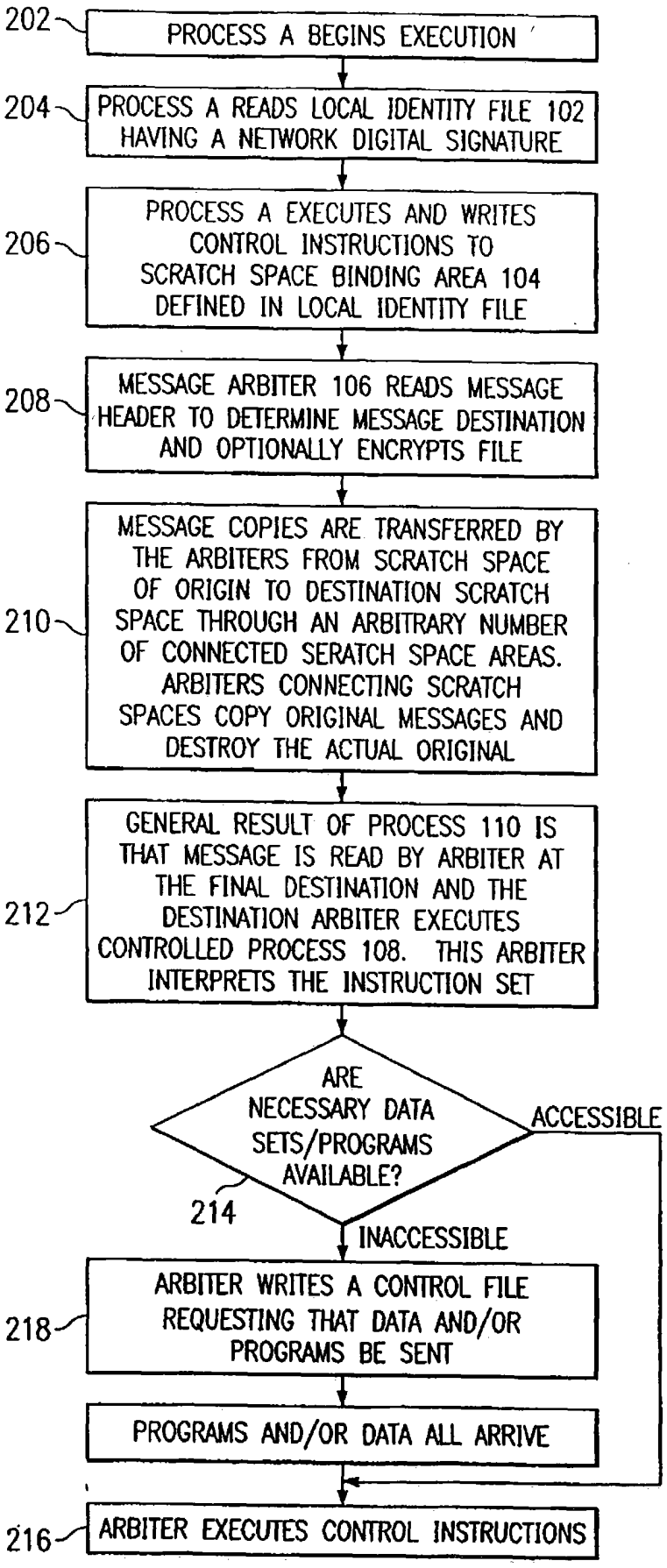

202
PROCESS A BEGINS EXECUTION
204
PROCESS A READS LOCAL IDENTITY FILE 102 HAVING A NETWORK DIGITAL SIGNATURE
206
PROCESS A EXECUTES AND WRITES CONTROL INSTRUCTIONS TO SCRATCH SPACE BINDING AREA 104 DEFINED IN LOCAL IDENTITY FILE
208
MESSAGE ARBITER 106 READS MESSAGE HEADER TO DETERMINE MESSAGE DESTINATION AND OPTIONALLY ENCRYPTS FILE
210
MESSAGE COPIES ARE TRANSFERRED BY THE ARBITERS FROM SCRATCH SPACE OF ORIGIN TO DESTINATION SCRATCH SPACE THROUGH AN ARBITRARY NUMBER OF CONNECTED SERATCH SPACE AREAS. ARBITERS CONNECTING SCRATCH SPACES COPY ORIGINAL MESSAGES AND DESTROY THE ACTUAL ORIGINAL
212
GENERAL RESULT OF PROCESS 110 IS THAT MESSAGE IS READ BY ARBITER AT THE FINAL DESTINATION AND THE DESTINATION ARBITER EXECUTES CONTROLLED PROCESS 108. THIS ARBITER INTERPRETS THE INSTRUCTION SET
ARE NECESSARY DATA SETS/PROGRAMS AVAILABLE?
214
ACCESSIBLE
INACCESSIBLE
218
ARBITER WRITES A CONTROL FILE REQUESTING THAT DATA AND/OR PROGRAMS BE SENT
PROGRAMS AND/OR DATA ALL ARRIVE
216
ARBITER EXECUTES CONTROL INSTRUCTIONS

FIG. 3

ALTERNATE MESSAGE STRUCTURES

A (CONTEXT DEFINED)
FILENAME=PROCESS IDENTIFICATION
FILE EXTENSIONS=CONTROL INSTRUCTION
FILE CONTENTS=DATA SET AND/OR DATA POINTERS

B (CONTENT DEFINED)
ANY NUMBER OF LINES IN A ARBITRARY ORDER
SOURCE ID: (16 BYTES)
DESTINATION ID: (16 BYTES)
DATA SET: (AN ARBITRARY NUMBER OF BYTES)
PROGRAM: (AN ARBITRARY NUMBER OF BYTES)
SPECIAL INSTRUCTION: (AN ARBITRARY NUMBER OF BYTES); (...);...
KEYBOARD EXECUTION: (AN ARBITRARY NUMBER OF BYTES)
CONFIRMATION REQUEST: (1 BYTE)
RETURN ID: (16 BYTES)
RETURN DATA SET: (AN ARBITRARY NUMBER OF BYTES)
RETURN ENCRYPTION LEVEL: (1 BYTE)
NETWORK CONTROL: (16 BYTES)
DATE: (AN ARBITRARY NUMBER OF BYTES)
TIME: (AN ARBITRARY NUMBER OF BYTES)
SEQUENCE: (16 BYTES)

FIG. 4

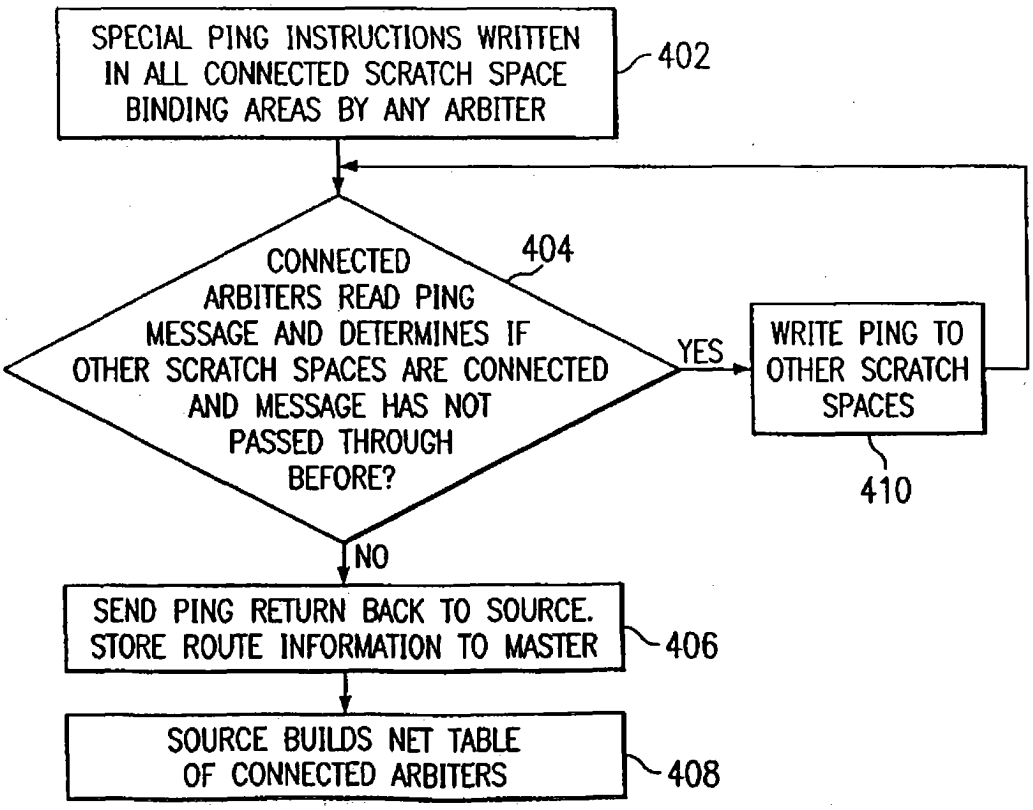
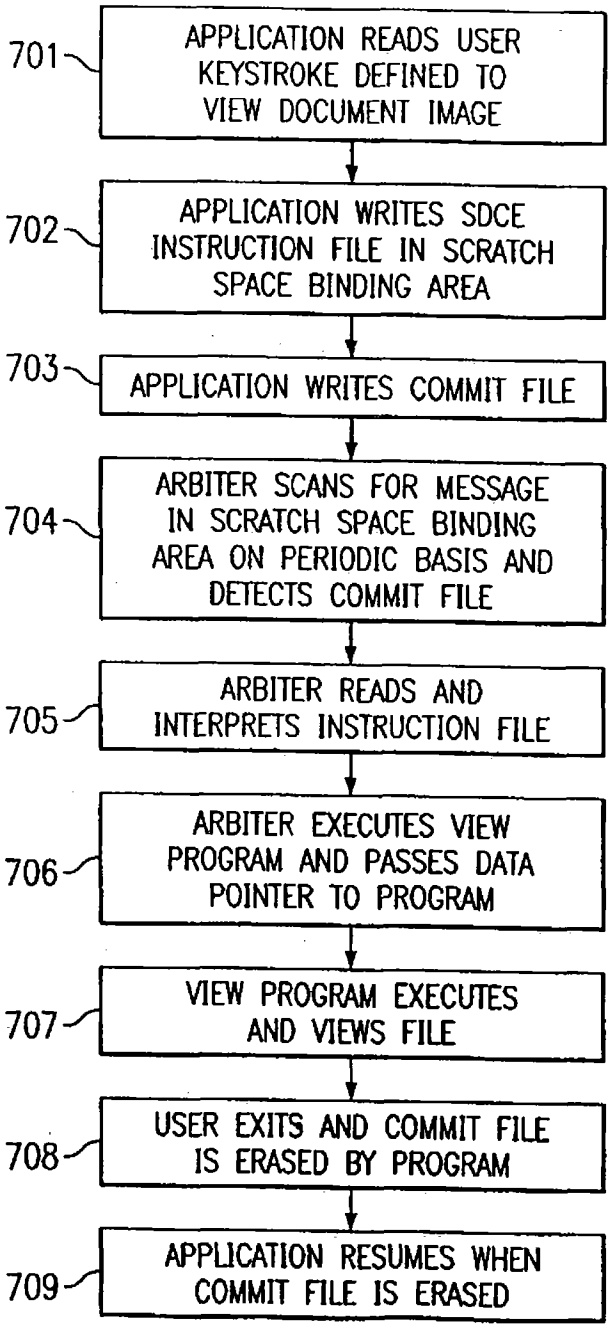


FIG. 7


701
APPLICATION READS USER KEYSTROKE DEFINED TO VIEW DOCUMENT IMAGE
702
APPLICATION WRITES SDCE INSTRUCTION FILE IN SCRATCH SPACE BINDING AREA
703
APPLICATION WRITES COMMIT FILE
704
ARBITER SCANS FOR MESSAGE IN SCRATCH SPACE BINDING AREA ON PERIODIC BASIS AND DETECTS COMMIT FILE
705
ARBITER READS AND INTERPRETS INSTRUCTION FILE
706
ARBITER EXECUTES VIEW PROGRAM AND PASSES DATA POINTER TO PROGRAM
707
VIEW PROGRAM EXECUTES AND VIEWS FILE
708
USER EXITS AND COMMIT FILE IS ERASED BY PROGRAM
709
APPLICATION RESUMES WHEN COMMIT FILE IS ERASED

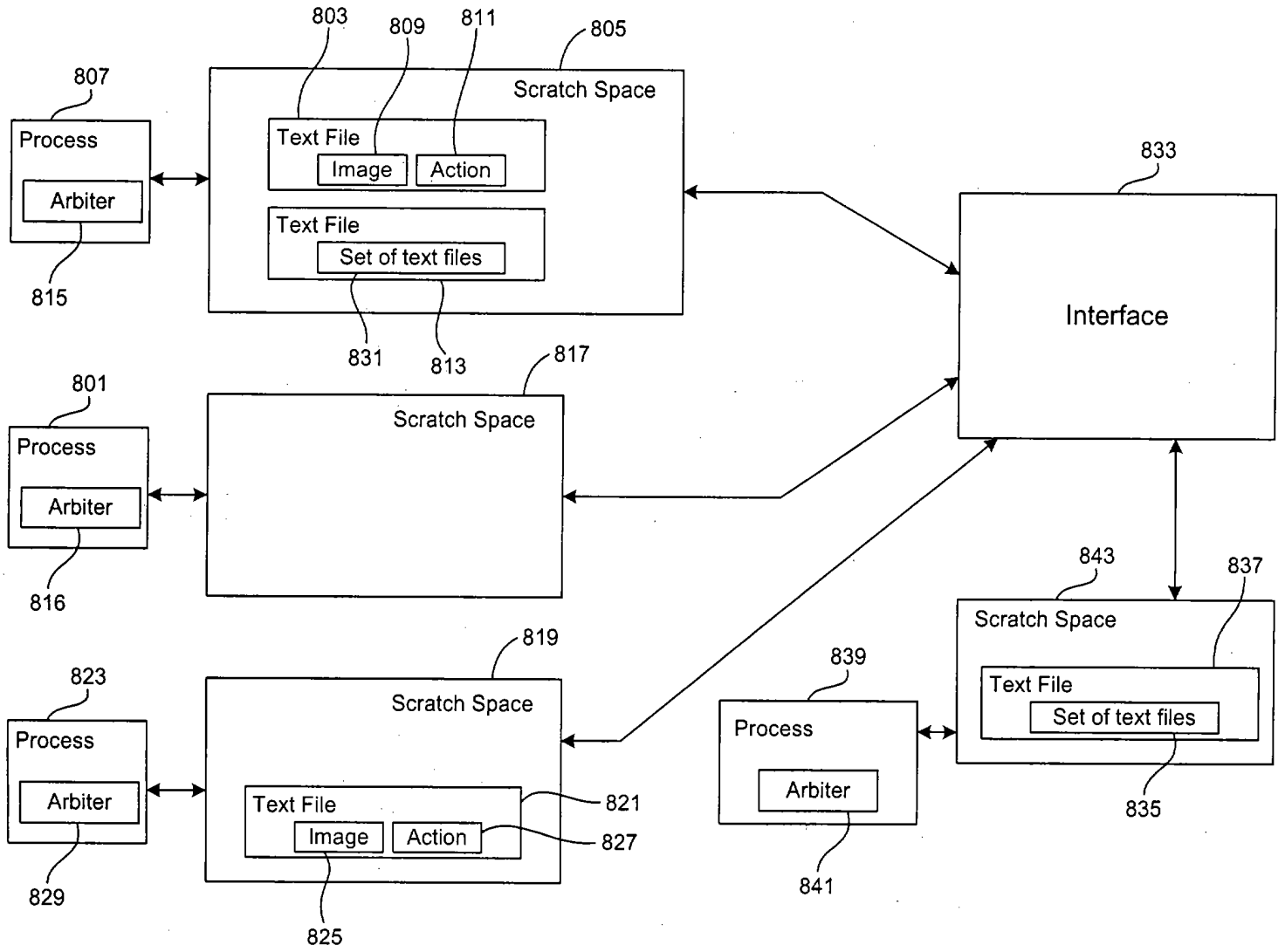

803
809
811
805
807
Scratch Space
Process
Text File
Image
Action
Arbiter
Text File
Set of text files
815
831
813
833
Interface
817
801
Scratch Space
Process
Arbiter
816
843
837
Scratch Space
819
839
823
Scratch Space
Process
Text File
Set of text files
Process
Arbiter
Text File
Image
Action
Arbiter
821
827
829
825
841
835

Fig. 8